

ABSTRACT

1
2 A portable computer system comprises a main body to which a power supplying unit is
3 connected, and an LCD apparatus having an LCD panel operated by electric power supplied by the
4 power supplying unit and a back light for illuminating the LCD panel. The system further
5 comprises: a DC/AC inverter for supplying AC power to the back light; a contrast sensing part for
6 sensing contrast of a video signal displayed on the LCD panel; a DC converter for converting a
7 PWM signal outputted from the contrast sensing part into a DC signal; a voltage controller provided
8 between the DC converter and the DC/AC inverter, and causing the DC signal from the DC
9 converter to be appropriate for an operating voltage of the DC/AC inverter so as to supply the
10 operating voltage to the DC/AC inverter; and a controller connected in series with the DC/AC
11 inverter for sensing the operating voltage of the DC/AC inverter, and for controlling the voltage
12 controller on the basis of the operating voltage. With this configuration, the brightness of a back
13 light can be automatically controlled according to a contrast sensed by a contrast sensing part
14 regardless of the input impedance of the inverter.